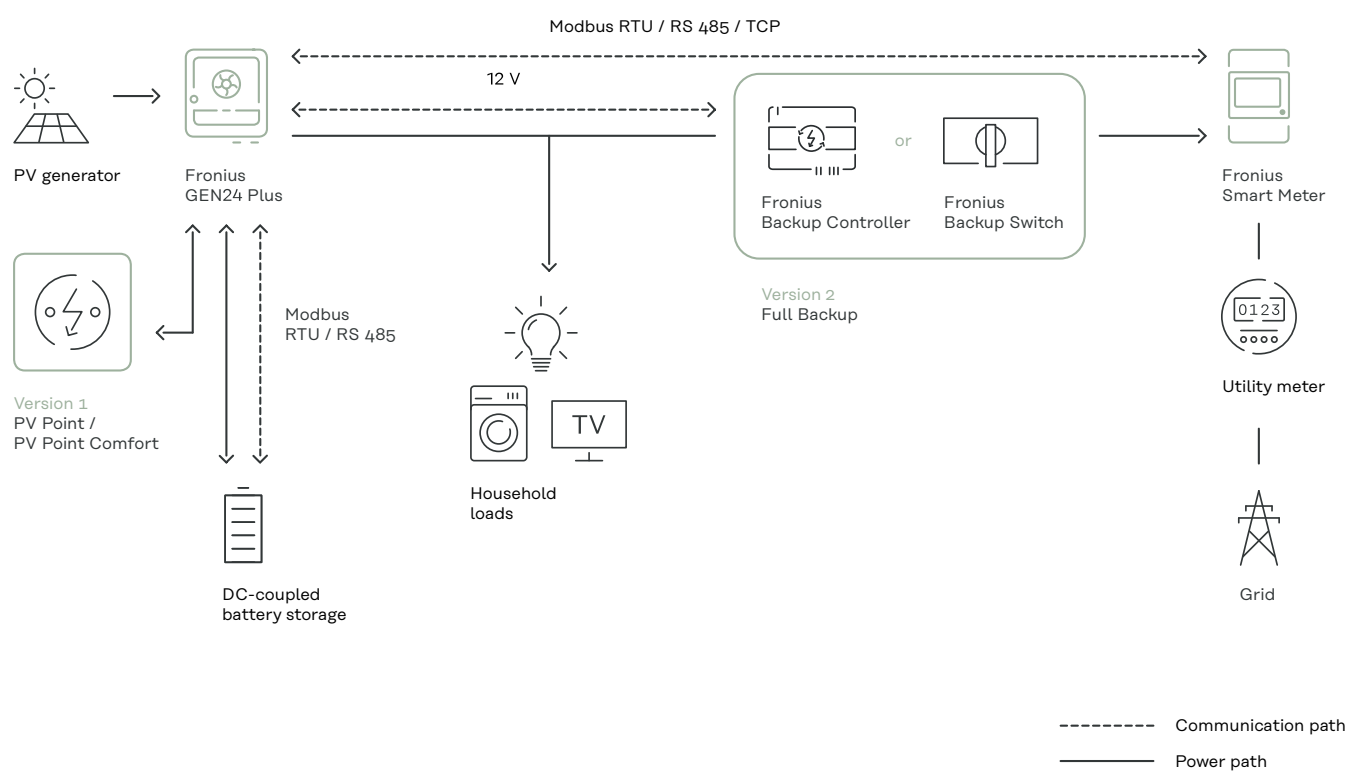




# Fronius Backup power solution

With Fronius GEN24 / GEN24 Plus, backup power switching components and Fronius Smart Meter



## All advantages at a glance

- 01 Customised backup power solutions
- 02 Everything from a single source
- 03 Black start capable
- 04 Space-saving installation
- 05 Supply for the entire household
- 06 Real three-phase AC

# Everything for energy security



## 01 Customised backup power solutions

You can rely on Fronius when it comes to backup power. Our backup power portfolio includes the right solution for every household. Whether a single-phase or three-phase supply for a single socket or the entire house, with automatic or manual switching, including or excluding energy storage - a customised system fulfils all customer requirements.

## 02 Everything from a single source

When it comes to energy security, those who count on Fronius rely on perfectly matched backup power components. From the inverter with integrated PV Point to the separate PV Point Comfort through to switching components we supply everything from a single source in European brand quality

## 03 Black start capable

With Fronius backup power components, PV systems can start up independently in the event of a prolonged power failure, supply loads and charge the battery for as long as PV energy is available - without any power from the grid.

## 04 Space-saving installation

No space? No problem. The Fronius Backup Switch and Backup Controller eliminate the need for external switching boxes. Our manual and automatic switching components are installed in the control cabinet to save cables and space.

## 05 Supply of the entire household\*

The Full Backup functions from Fronius enable an backup power supply for all consumers in the household with maximum energy utilisation through simultaneous charging of the energy storage system.

## 06 Three-phase current

Fronius is the ideal solution for power-intensive loads. The Fronius Symo GEN24 Plus 6.0 - 12.0 generates genuine three-phase alternating current for maximum performance even in backup power mode.

*\*If load in the household < PV production/discharge capacity of the storage system*

## What is needed for the implementation?

### PV Point:

- Integrated backup power function
- Supplied socket in the event of a power outage
- 1-phase up to 3 kW continuous power
- Optional battery storage

Device	Type	Notes
Fronius Inverter	Fronius Primo/Symo GEN24	The backup power frequency can be set on the inverter user interface in the range between 45 and 55 Hertz.
	Fronius Primo/Symo GEN24 Plus	
Protection	Residual current circuit breaker type A 30 mA	
Energy meter	Fronius Smart Meter 63A-1, 63A-3, 50kA-3	For the Fronius Smart Meter 50kA-3, current transformers with an output current of 5 A must be used
	Fronius Smart Meter TS 100A-1, TS 65A-3, TS 5kA-3	For the Fronius Smart Meter TS 5kA-3, current transformers with a TS 100A-1, TS 65A-3, TS 5kA-3 output current of 5 A Must be used
	Smart Meter IP	For the Smart Meter IP, current transformers with an output voltage of 333 mV must be used
Battery storage (optional)	Option 1: BYD Battery-Box Premium HVS/HVM	Compatible types of the BYD Battery-Box Premium HVS: HVS 5.1; HVS 7.7; HVS 10.2 Compatible types of the BYD Battery-Box Premium HVM: HVM 11.0; HVM 13.8; Option 1: BYD Battery-Box HVM 16.6; HVM 19.3; HVM 22.1  Battery storage is optional for the operation of a PV Point. However, a battery storage system is recommended for stable backup power operation.
	Option 2: LG FLEX	Compatible types of LG FLEX: 8.6; 12.9; 17.2  Battery storage is optional for the operation of a PV Point. However, a battery storage system is recommended for stable backup power operation

# PV Point Comfort:

- Retrofit circuit board
- Supplies a socket or circuit in the event of a power outage and also in mains parallel operation
- 1-phase up to 3 kW continuous power
- Optional battery storage

Device	Type	Notes
Fronius Inverter	Fronius Primo/Symo GEN24	The backup power frequency can be set on the inverter user interface in the range between 45 and 55 Hertz.
	Fronius Primo/Symo GEN24 Plus	
PV Point Comfort	Artikelnummer 4,240,315,CK	Is installed in the connection area of the inverter Can also be retrofitted in inventory
Protection	Residual current circuitbreaker type A 30 mA	If required, a line protection device with a maximum of 16A can also be used for protection. However, a maximum of 13A can be provided in backup power mode
	Line protection recommended 13 A; maximum 16A	
Energy meter	Fronius Smart Meter 63A-1, 63A-3, 50kA-3	For the Fronius Smart Meter 50kA-3, current transformers with an output current of 5 A must be used
	Fronius Smart Meter TS 100A-1, TS 65A-3, TS 5kA-3	For the Fronius Smart Meter TS 5kA-3, current transformers with a TS 100A-1, TS 65A-3, TS 5kA-3 output current of 5 A Must be used
	Smart Meter IP	For the Smart Meter IP, current transformers with an output voltage of 333 mV must be used
Battery storage (optional)	Option 1: BYD Battery-Box Premium HVS/HVM	Compatible types of the BYD Battery-Box Premium HVS: HVS 5.1; HVS 7.7; HVS 10.2 Compatible types of the BYD Battery-Box Premium HVM: HVM 11.0; HVM 13.8; Option 1: BYD Battery-Box HVM 16.6; HVM 19.3; HVM 22.1
	Option 2: LG FLEX	Battery storage is optional for the operation of a PV Point. However, a battery storage system is recommended for stable backup power operation. Compatible types of LG FLEX: 8.6; 12.9; 17.2 Battery storage is optional for the operation of a PV Point. However, a battery storage system is recommended for stable backup power operation

## Backup services for PV Point and PV Point Comfort:

	Primo GEN24 & GEN24 Plus	Symo GEN24 & GEN24 Plus
Power [VA] - Permanent	3000	3000
Power [VA] - Overload 5 sec.	4700	4133

## Full Backup:

- Complete supply of the entire household with full AC output power
- Maximum supply through manual or automatic switching
- Space-saving installation directly in the switch cabinet
- Fronius Symo GEN24 6.0 - 12.0 Plus supplies 1- and 3-phase electrical loads including real 3-phase AC loads
- Maximum energy utilisation through simultaneous operation of consumers and battery charging

Device	Type	Notes
Fronius Inverter	Fronius Primo und Symo* GEN24 Plus	Die Notstromfrequenz kann auf der Wechselrichter Benutzeroberfläche im Bereich zwischen 45 und 55 Hertz eingestellt werden.
Switching components	Option 1: Fronius Backup Switch – 1P/3P-63A – 1PN/3PN-63A	Manual switching solution Maximum current carrying capacity: 63A Space-saving installation in switch cabinet possible
	Option 2: Fronius Backup Controller – 3P-35A	Automatic switching solution Maximum current carrying capacity: 35A Space-saving installation in switch cabinet possible
Energy meter	Fronius Smart Meter 63A-1, 63A-3, 50kA-3	For the Fronius Smart Meter 50kA-3, current transformers with an output current of 5 A must be used
	Fronius Smart Meter TS 100A-1, TS 65A-3, TS 5kA-3	For the Fronius Smart Meter TS 5kA-3, current transformers with a TS 100A-1, TS 65A-3, TS 5kA-3 output current of 5 A Must be used
	Smart Meter IP	For the Smart Meter IP, current transformers with an output voltage of 333 mV must be used
Battery storage	Option 1: BYD Battery-Box Premium HVS/HVM	A battery storage unit is required for Full Backup operation.
	Option 2: LG FLEX	

\* The Full Backup option is not available for the Fronius Symo GEN24 3.0 - 5.0 Plus.

### Full backup services:

Performance class	Primo GEN24 Plus		Symo GEN24 Plus	
	3.0 – 6.0	8.0 – 10.0	6.0 – 10.0	12.0 SC
Power [VA] - Overload 5 sec.	6200	11024	12400	12765
Phase power [VA] - Continuous	–	–	3680	4133
Phase power [VA] - 5 sec.	–	–	4133	4255

# Monitoring & Digital Tools.

The right digital tool for every phase of the PV system.

## Planning

If you are planning a new project, **Fronius Solar.creator** is the first choice. With the **free online configuration tool**, you can plan from anywhere and design the PV system in just a few steps. You can also use it as a **consultation tool** in discussions with customers. When it comes to expanding an existing system with battery storage or similar, the effects can be simulated in advance with **Fronius Solar.web**.

## Commissioning

With **Fronius Solar.start**, system installation is more efficient than ever. The app guides you through the setup of Fronius devices in **3 steps** and makes **commissioning**, including configuration, a matter of a few minutes.

## Monitoring

Once the PV system is successfully in operation, the energy utilisation begins - but also the **system optimisation via monitoring**. With **Fronius Solar.web**, we provide you with the best tool for this. It allows you to keep a close eye on all the PV systems you manage, in order to sustainably increase their performance based on data.

## Service

**Fronius Solar.SOS** helps you **diagnose and rectify faults** and order the right replacement components. All this is available around the clock, regardless of normal service hours and in the local language.

## Any questions?



You can find our how-to videos here -  
Expertise in a nutshell.



You can access the recordings of our webinars here.

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